Worksheet - Lecture 11
Least Squares

For the following problems you may use software or an online matrix inverse calculator to compute any matrix inverse required. One option can be found here:

http://matrix.reshish.com/inverse.php

1. Find the least squares solution to following inconsistent system:

$$\begin{pmatrix} 2 & -2 \\ -2 & 2 \\ 5 & 3 \end{pmatrix} \begin{pmatrix} \beta_1 \\ \beta_2 \end{pmatrix} = \begin{pmatrix} -1 \\ 7 \\ -26 \end{pmatrix}$$

2. Use the method of least squares to find the regression equation associated with Problem 3 on Worksheet 5 (regarding SAT scores).